

that number portability is critical to the ability of wireless carriers to compete for wireline business.⁵⁷ In addition, digital wireless phones are not compatible with TTY devices for people who are deaf, hard of hearing or have speech or language disabilities. Finally, while digital PCS may one day reliably deliver wireline quality voice transmission, it does not do so today. According to a recent survey, analog cellular networks still deliver better overall perceived voice quality than PCS.⁵⁸ These deficiencies of PCS as compared to wireline service, in addition to its substantial price premium, further limit its ability to compete for BellSouth's local customers.

IV. Assessing Potential Local Competition in Louisiana

BellSouth's application relies heavily on the proposition that local exchange markets in Louisiana are currently open to competition, irrespective of the minimal actual wireline and PCS competition observed. As a starting point, this proposition seems inconsistent with Sprint's experience to date in other BellSouth states in which BellSouth reportedly employs the same processes and systems in support of unbundled elements as in Louisiana. Beyond that, however, one can assess the state of competition by looking at the stated plans and commitment of sunk costs by would-be entrants, and by looking directly at barriers to entry.⁵⁹

⁵⁷ See, e.g., *Telephone Number Portability*, C.C. Docket No. 95-116, 3rd Report and Order, released May 12, 1998, at ¶18.

⁵⁸ "Americans Head in Sand over Digital?," *Digital Cellular Report*, v. 4, no. 9 (July 7, 1998) reporting on the results of a survey by Herschel Shostek Associates, Ltd. Interviews with PCS subscribers that were submitted with BellSouth's filing as part of the Denk Declaration offer several examples of call quality problems with PCS. Respondents discuss issues with call clarity and, at one point, a call is dropped mid-interview (See, e.g., M/A/R/C Study Transcripts, p. 67-71).

⁵⁹ Appendix A includes a portion of Professor Shapiro's testimony in BellSouth's South Carolina Section 271 application, where he discusses the general economic principles for assessing the state of potential competition.

A. Evidence of Entry Plans and Sunk Investments

Our examination of the announced plans of the potential and actual local exchange entrants identified in the BellSouth application does not reveal the imminent emergence of local exchange competition in Louisiana. Only one wireline CLEC, e.spire (formerly ACSI), offered local exchange service prior to 1998. The other five CLECs identified by BellSouth are in various preliminary stages of service provision. KMC has been providing service “since early 1998” (Wright Affidavit, at ¶93); Hyperion has “begun rolling out” service in Baton Rouge (Wright Affidavit, at ¶104); AMC has “only recently begun the introduction” of its local exchange service (Wright Affidavit, at ¶84); SOSCo is “completing installation of billing, job control, order processing, inventory control, and other back office systems” (Wright Affidavit, at ¶113); and AT&T is not considered a serious entrant at this time (Wright Affidavit, at ¶122). Only one wireline CLEC, KMC, is offering facilities-based local service to residential customers, and that service is being provided to no more than a handful of customers. All told, these CLECs serve a total of 4,282 access lines, a tiny fraction of BellSouth’s 2.25 million access lines in Louisiana.

Lacking direct evidence that significant competition in local exchange markets is imminent, the analysis proceeds to the next step, looking for significant investments of sunk costs specific to local exchange service in Louisiana. Investments that are sunk and specific to the provision of local exchange service provide some indication of future competition. How significant are such investments in Louisiana? The record is unclear on this question. Certainly there are some facilities in Louisiana, such as the networks of e.spire, AMC, KMC, SOSCo and Hyperion that have been equipped to provide local exchange services. These facilities, however, are concentrated in the central business districts of New Orleans, Baton Rouge and Shreveport, and it appears that they are principally serving on-net customers, *i.e.*, the customers are served entirely by CLEC facilities. Consequently, there is little experience with provisioning unbundled network elements in Louisiana at this time. Based on the evidence submitted by BellSouth in this

proceeding, we are uncertain whether BellSouth has provisioned any unbundled loops in Louisiana at this time.⁶⁰ These initial investments in local exchange facilities are a start, but hardly an indication that widespread or significant competition is imminent.

Given the competitive pressure in the industry to offer broader bundles of telecommunications services to customers, a lack of significant entry into local exchange markets, *e.g.*, by major interexchange carriers, suggests that the terms and conditions of interconnection are not yet conducive to that entry.

B. Entry Barriers into Local Exchange Markets in Louisiana

Without compelling direct evidence indicating that local exchange competition has arrived in Louisiana, the next step in the economic analysis is to look directly at the entry barriers into local exchange markets in Louisiana.

1. Risks Associated with Local Entry Generally

Until CLECs can be confident that they will obtain interconnection on commercially acceptable terms that will allow them to achieve operational parity with BellSouth, entrants surely attribute considerable interconnection risk to any sunk investments they might contemplate. This “risk premium” can serve only to delay or deter entry and the advent of competition. This is especially true for a company like Sprint, with a valuable brand name that could be put at risk if service quality is degraded due to interconnection problems. We would expect Sprint and others to be extremely wary of offering service, and undertaking the concomitant marketing expenses, under their brand names unless and until they can ensure service quality—from the pre-ordering of services to the provisioning of repair—on par with BellSouth. To do otherwise would put their brand names at risk in Louisiana, and potentially place them at a major disadvantage for years to come in selling bundles of

⁶⁰ According to the BellSouth Brief, “As of June 1, approximately 107 loops had been promised in Louisiana.” (BellSouth Brief, p. 43). But see the Wright Affidavit: “as of June 1, 1998, two wireline facilities-based CLECs had requested and placed in service approximately 100 unbundled network loops in Louisiana.” (Wright Affidavit, at ¶41).

services in competition with BellSouth. If Sprint's brand name is tarnished as a result of premature entry into local service, its accumulated goodwill in long-distance could likewise be jeopardized. As noted below, for a number of aspects of interconnection, it is currently impossible for CLECs to ensure that they are receiving competitive and operating parity with BellSouth itself.

2. *Unresolved Interconnection Issues in Louisiana*

It is imperative that interconnection issues be resolved before concluding that competition is enabled; when it comes to interconnection, the devil truly is in the details. The myriad aspects of interconnection cannot be left for later, because they are so crucial to CLECs' abilities to compete effectively. Many aspects of interconnection that remain unresolved have significant implications for either CLECs' costs or the quality of their service, and thus for the attractiveness of entry into local markets.

If CLECs were providing services on a commercial scale in a variety of settings in Louisiana, we could be confident that interconnection was working (although the need for ongoing regulation would not soon end). In fact, however, CLECs collectively provide facilities-based service to only a minute fraction of Louisiana's business customers and to almost no residential customers. The limited presence of PCS providers does little to demonstrate the extent to which BellSouth's local interconnection processes and operational support systems are working, because PCS providers are not reliant upon the vast majority of these processes or facilities. PCS providers do not purchase unbundled network elements from the BOC, and consequently do not use the retail ordering and billing systems; instead, PCS carriers use the wholesale systems for ordering trunks which have been in existence for years and are, as opposed to newly-created interconnection processes and OSS, well-tested. Moreover, numerous problems have been reported with BellSouth's interconnection terms and conditions across its region and, short of evidence of interconnection working in a variety of circumstances, there is no assurance that these problems have been worked out in Louisiana.

Under these circumstances, and given the attractiveness of the Louisiana marketplace to a number of carriers, including the larger interexchange carriers seeking to

offer bundles of telecommunications services, we believe there should be a presumption that the terms and conditions of interconnection either (a) fail to provide parity between BellSouth and CLECs, or (b) simply have not been available long enough to be reliably tested and used by CLECs. In the former case interconnection is either not yet fully implemented or is discriminatory, and Section 271 approval is inappropriate. In the latter case, especially given the reported problems with interconnection in other BellSouth states, the public interest is still served by waiting until interconnection is confidently enabled before granting BellSouth in-region long-distance authority.

When significant aspects of interconnection remain unresolved, CLECs' abilities to compete remain significantly under the control of the BOC. If further cooperation from the BOC is needed to make actual or potential local exchange competition economically meaningful, approval of the BOC's Section 271 application is premature and will diminish consumer welfare.

Nor can the FCC, or the LPSC, simply compel BellSouth to meet reasonable interconnection terms in the future. Regulation is inevitably highly imperfect, and entrants will be reluctant to rely on future, uncertain regulatory protections when making substantial sunk investments. There is much to be said for "stress testing" interconnection terms and conditions in practice before concluding that an interconnection agreement can work in practice and that interconnection is "fully implemented." Ultimately, since regulation is necessarily imperfect, the public interest is served by augmenting the usual set of regulatory tools by using the 271 process to help induce BellSouth and other BOCs to offer workable, high-quality interconnection.

The experiences of Sprint and other would-be CLECs in other BellSouth states confirm how difficult it is to make interconnection really work in practice. Specific aspects of interconnection remain to be fully implemented in all of BellSouth's service areas, including Louisiana. Some difficulties are inevitable; interconnection is highly complex, and only now are BellSouth and CLECs hammering out the details. But that is precisely the point. There is great value in giving incentives to BellSouth, the incumbent monopolist, to cooperate to resolve these disputes and clarify remaining ambiguities.

Without intending to offer an exhaustive or necessarily representative list of outstanding interconnection issues in BellSouth states, we list a number of them here to illustrate that they are both unresolved and truly critical for CLECs to enter and grow.⁶¹

- In a filing regarding this application, Sprint comments that it “does not believe that BellSouth’s currently deployed OSS interfaces meet the standard of nondiscriminatory access. Many of the interfaces BellSouth has introduced to date are interim solutions which do not provide parity with BellSouth’s retail systems. ‘Long term’ or ‘permanent’ interfaces will be designed to conform to industry standards whenever possible and to provide full systems flow-through. While these permanent interfaces offer the greatest promise for the provision of nondiscriminatory access, they are still being developed and/or tested. Until these interfaces are fully documented, developed and tested in a real world operating environment, their ability to afford CLECs the opportunity to provide a parity of experience to what BellSouth provides its own end-users will be unknown,” (Affidavit of Melissa Closz, “Closz Affidavit”, at ¶5).
- In its comments, Sprint cites a number of problems with BellSouth’s OSS interfaces. CGI-LENS, BellSouth’s machine-to-machine interface for pre-ordering information access is not based on industry standards and so will prove unacceptable to many multi-region or national CLECs (Closz Affidavit, at ¶19). Similarly, EC-Lite was developed specifically for use by AT&T and is not industry standard (Closz Affidavit, at ¶23). One of BellSouth’s more promising interfaces, TAG pre-ordering capability, is not scheduled for implementation by BellSouth until August 30, 1998. Sprint thinks it is unlikely that CLECs will be able to take advantage of the interface at that time because they were not provided with the functional requirements for the system until late June 1998 (Closz Affidavit, at ¶15-16).
- In its facilities-based CLEC operation in Florida, Sprint uses the Exchange Access Control and Tracking (EXACT) interface to electronically transmit local loop orders to BellSouth. Sprint must place separate orders with BellSouth for local number portability and directory listings via fax. Sprint currently requests and receives customer service record (CSR) information via LENS (Closz Affidavit, at ¶25-27).
- In the nearly two years that Sprint has issued unbundled network element orders to BellSouth in Florida, BellSouth has failed to meet its commitment to provide Firm Order Commitments (FOCs) within 48 hours every month but one. Because of this failure, Sprint personnel must spend significant amounts of time repeatedly calling BellSouth to check on the status of FOCs. When a FOC is not received on time, Sprint’s internal order process is delayed, reducing the probability that the desired installation date will be met. Aside from the obvious disadvantage of missed deadlines, this uncertainty is problematic for Sprint in

⁶¹ Because we did not have access to other CLEC’s filings regarding this application, most of the examples cited here by necessity concern Sprint’s operations. We have been careful to update this list to current problems.

that it prevents Sprint from confirming desired due dates with its customers (Closz Affidavit, at ¶58).

- This year, problems with BellSouth facilities impacted 10 percent of Sprint Florida orders in January, 4 percent in February, 17 percent in March, 5 percent in April, 5 percent in May, and 30 percent in June. BellSouth has provided no data to demonstrate what percentage of its own orders are impacted by facilities problems. 74 percent of Sprint's customer desired due date commitment misses in 1998 were attributable to BellSouth reasons (Closz Affidavit, at ¶59-60).
- BellSouth proposes to report performance measures on a region-wide or state-wide level of detail. State-wide aggregation could mask large differences in performance across geographic regions, making it difficult for CLECs to determine if they were receiving substandard service (Letter from William R. Atkinson to the Louisiana Public Service Commission, dated May 22, 1998).
- BellSouth continues to meet with substantial complaints from CLECs throughout its service area. For example, on July 20, twelve telephone service providers filed a petition asking the North Carolina Utilities Commission to make BellSouth sit down with them to eliminate barriers that have prevented CLECs entry into the residential market and slowed expansion in the business market. A spokesman for the Raleigh-based company BTI cited a customer support system that is not yet fully automated, forcing CLECs to sometimes fax repair requests and service orders, as one of the problems.⁶²

In listing these outstanding interconnection issues, one need not assume that every criticism of BellSouth's interconnection arrangements and negotiations is meritorious. Our point is simply that interconnection in Louisiana is currently in a tremendous state of flux, and that CLECs remain heavily reliant on BellSouth for key inputs.

⁶² Shannon Buggs, "BellSouth's rivals file petition," *The News and Observer*, July 21, 1998.

These examples are not meant to cover all of Sprint's concerns in Louisiana, and we do not claim familiarity with the details of Sprint's planned local operations in Louisiana or its negotiations with BellSouth. However, they illustrate a variety of important "details" that must be worked out in practice before Sprint can successfully offer local exchange services.

I declare under penalty of perjury, under the laws of the United States of America, that the foregoing is true and correct to the best of my knowledge, information, and belief.

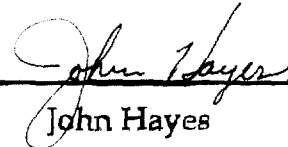
Executed on the 30th day of July, 1998 in Victoria, Canada



Carl Shapiro

I declare under penalty of perjury, under the laws of the United States of America, that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on the 31st day of July, 1998 in Oakland, California



John Hayes

Appendix A

Economic and Public Interest Framework for Evaluating Section 271 Applications

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Economic and Public Interest Framework for Evaluating Section 271 Applications¹

I. Summary of Testimony

My testimony covers two broad areas. First, I offer a general economic framework for evaluating Section 271 applications, including BellSouth's application to provide in-region interLATA services in South Carolina. My hope is that the Federal Communications Commission ("FCC" or the "Commission") will find this framework useful in evaluating this and other Section 271 applications according to the public interest standard in the Act. Second, drawing on BellSouth's application and the filings of other interested parties, I apply my framework to South Carolina. In particular, I evaluate the current state of local exchange interconnection and local exchange competition in South Carolina.

A. Economic Framework

In the general part of my analysis that presents an economic framework for assessing Section 271 applications, I conclude that interconnection agreements must be demonstrated to be working in practice on a commercial scale before checklist compliance can be regarded as economically meaningful, and in order to meet the public interest standard for approving Section 271 applications under Track A.

¹ Originally filed as Declaration of Carl Shapiro on Behalf of Sprint, In the Matter of the Application by BellSouth for Provision of In-Region InterLATA Services in South Carolina, Before the Federal Communications Commission, October 17, 1997. This does not constitute the entire declaration as filed in that proceeding; only those portions outlining my economic and public interest framework for evaluating Section 271 applications, generally, are included

While Track B can be appropriate if competitive local exchange carriers (CLECs) truly are not attempting to interconnect, the public interest will not be served if Track B can be used to circumvent the “working in practice on a commercial scale” standard just articulated for Track A. Given the significant harm to local competition that predictably will occur if 271 approval is prematurely granted, the Bell Operating Company (BOC) has a considerable burden under Track B to provide convincing evidence that barriers to interconnection have indeed been eliminated. The fact that American Communications Services Inc. (ACSI), which has no strategic motive to keep BellSouth out of long distance, has identified problems with interconnection with BellSouth, suggests that these barriers remain real.

There is widespread agreement that the public interest will be served if states and the FCC take advantage of the historic opportunity provided by the Act to ensure that local telephone markets are opened up to competition. Since these markets are currently monopolized, economics tells us that introducing competition into them offers potentially large social gains. To open these markets will require ongoing, extensive, and detailed cooperation from incumbent local exchange carriers (ILECs). No monopolist lightly relinquishes its dominant position. Recognizing this, Congress provided a powerful incentive for Bell Operating Company cooperation by providing conditions necessary for BOCs to enter interLATA markets.

It would be a mistake to relinquish the Section 271 lever until local markets are demonstrably open. If Section 271 authorization is granted before we are confident that the required BOC cooperation has indeed been forthcoming and will continue, the strong incentives for BOC cooperation created by the Section 271 process will be lost, and the

emergence of local competition will be undermined. This situation would be difficult to rectify, since Section 271 approval would be virtually impossible to reverse. On the other hand, if Section 271 approval is deferred until interconnection has been proven to work, such approval can then be granted quickly once local competition is reliably enabled. Thus, uncertainty favors erring on the side of caution and withholding approval until meaningful interconnection has been clearly demonstrated.

Premature approval of Section 271 applications is especially dangerous since competitive local exchange carriers are so reliant on BOCs to gain even a foothold in local markets, and since the required cooperation is so multifaceted and complex. Because of these complexities, regulatory oversight will necessarily be highly imperfect, especially until procedures have been ironed out and interconnection has been proven to work in practice. To approve BellSouth's South Carolina Section 271 application before the highly intricate and complex interconnection relationships between BellSouth and CLECs have been demonstrated to work runs the risk of prematurely eliminating the major incentive for BellSouth to cooperate with its would-be rivals.

B. South Carolina Application

Applying these principles to BellSouth's South Carolina application shows clearly that approval of this application by the Commission under Track A would be unwarranted. The record shows clearly that local exchange competition in South Carolina remains a prospect, not a reality. The Section 271 authorization process should be used to help turn that prospect into reality. Given the *de minimis* state of local competition in South Carolina, in-region long-distance authorization in South Carolina is not in the public

interest absent a clear showing that entry barriers into local exchange markets relating to interconnection with BellSouth truly have been eliminated.

Detailing the specific interconnection items in dispute, and evaluating the extent to which BellSouth's shortcomings have contributed to the disputes, is beyond the scope of my testimony, but the record indicates that important interconnection issues, both technical and economic, remain unresolved. Even with the best of intentions by BellSouth, the fact remains that BellSouth's economic incentives are to protect its monopoly, not to enable local competition. Since the conditions of local competition in South Carolina are so new and untested by actual commercial use, prudence favors deferring in-region long-distance authorization for BellSouth until the Commission can assert with confidence that local entry through a variety of business strategies has truly been enabled through BellSouth's interconnection provisions.

I appreciate that BellSouth is arguing that it has indeed opened its local markets to competition, and should not be kept out of long-distance markets merely because CLECs are slow to enter. If conditions were truly and reliably in place for local competition to thrive, and independent business decisions of would-be CLECs alone were delaying that competition, Track B approval would indeed serve the public interest. I cannot conclude based on the record that South Carolina today fits this description. As I discuss below, important aspects of interconnection do not yet appear to be reliably in place in South Carolina. BellSouth suggests that the lack of entry into local exchange markets in South Carolina solely reflects a lack of interest in these markets by CLECs.² However, it makes

² Brief in Support of Application by BellSouth for Provision of In-Region InterLATA Services in South Carolina, Before the Federal Communications Commission, September 30, 1997. ("BellSouth Brief") page 14-15.

little economic sense for Sprint and other CLECs to invest heavily to serve the South Carolina market, knowing that the necessary interconnection is not yet available.

BellSouth further argues that potential local competitors are tailoring their entry efforts to “keep the Bell companies out of long distance,” and it encourages this Commission to “break the logjam by authorizing interLATA competition under Track B.” (BellSouth Brief at p. iii) Given the problems experienced by Sprint and others interconnecting with BellSouth in other BellSouth states, I do not see how BellSouth can credibly claim that such strategic concerns alone are driving entry decisions in South Carolina. Furthermore, the experiences of non-IXC CLECs, such as ACSI, are quite informative in this regard, as they have no economic incentive to keep BellSouth out of the long distance market.

I am also concerned that granting BellSouth’s request at this time would not only remove much of the pressure on BellSouth to truly cooperate and open up its local exchange markets, but would further send a signal to other BOCs that they can gain in-region long-distance authority without truly opening up their local markets to competition. This would be contrary to the public interest.

II. Economic Objectives in Section 271 Applications: General Principles

There are three major economic and policy objectives that must be balanced in evaluating BOC Section 271 applications to offer in-region long-distance service. Ultimately, determining whether in-region interLATA authorization for BellSouth would be consistent with the public interest, convenience, and necessity turns on the impact of authorization in these three areas. These factors are: (1) expansion of consumer choice in

local markets; (2) increasing competition in interLATA markets; and (3) leveling the playing field as markets merge.

A. Opening Local Exchange Markets to Competition

My testimony focuses on the first factor, namely the impact on local exchange competition in South Carolina of approving or denying BellSouth's application. The 1996 Telecommunications Act provides an historic chance to open up local exchange markets, which are the most significant remaining bottleneck monopolies in the telecommunications sector. If our experience in long-distance markets is any guide, the introduction of competition into local exchange markets will generate substantial consumer benefits in the form of new services and lower prices, once a variety of thorny interconnection issues are worked out.

Introducing competition into local exchange services will require the cooperation of the ILECs. This cooperation is unlikely to be voluntary; no monopolist, regulated or not, is keen to relinquish its dominant position. Furthermore, direct regulation of BellSouth's conduct in and of itself is a highly imperfect means of ensuring viable local competition — there is too much scope for BellSouth to get around the spirit if not the letter of the interconnection rules, and to impose its own interpretation of its interconnection duties. This danger is greatest before the many aspects of interconnection are tested in practice and understood by competitive local exchange carriers and regulators alike.

So long as Section 271 authorization remains pending, BellSouth has incentives to fix posthaste problems with CLECs; once Section 271 authorization is granted, BellSouth

will have fewer incentives to quickly resolve disputes over the myriad details of interconnection, although CLECs will remain heavily dependent upon BellSouth. This highly asymmetric situation would not be conducive to resolving the many interconnection issues that are vital to making local exchange competition a reality.

The implication of this analysis is that the path to genuine local competition will be far smoother if BellSouth, and the other BOCs, are given incentives to partially offset their natural economic incentives to protect their monopoly positions and to cooperate in making local competition truly possible. By insisting, as a condition for entry into in-region interexchange service, that BellSouth demonstrate that it has truly put in place the conditions necessary for local competition to flourish, the Section 271 process can be used to induce cooperation. This *quid pro quo* is central to the development of local exchange competition.

There is some specific evidence confirming the importance of this incentive structure. It is my understanding that local competition is no further advanced in local service areas served by Southern New England Telecommunications Corporation (SNET) and by GTE than in the BOC service areas generally.³ Yet BellSouth would have us believe that 271 relief will speed local exchange competition in South Carolina. (BellSouth Brief at p. 102-103) The experiences of SNET and GTE provide scant evidence to support such a view.

³ There is admittedly inconclusive evidence that unbundled network elements (UNEs) are considerably more expensive in GTE's and SNET's service areas. The average loop price in GTE's service areas, at \$18.92, is the highest average loop price among the major LECs and, on average, is almost 40% higher than the FCC proxy rates in those regions. SNET's loop price is over 20% higher than the FCC proxy rate for Connecticut. See "The Status of Agreements Between the Major LECs and CLECs - Update," by Kristin Burns and Anna-Maria Kovacs. Janney Montgomery Scott (JMS), May 23, 1997.

B. Impact on Competition in Long-Distance Markets

Long-distance entry by BellSouth is not just a reward for providing meaningful interconnection with local rivals; it has direct implications for long-distance markets. If BellSouth can be prevented from misusing its bottleneck local monopoly to disadvantage its long-distance rivals, then permitting BellSouth to enter the long-distance market will render that market more competitive. One reason to insist that local competition has truly been enabled before granting Section 271 authorization is to reduce the dangers of such misuse.

In any overall balancing of impacts on local and long-distance markets, it is important to remember that the U.S. long-distance marketplace is currently far more competitive than are local exchange markets served by BellSouth. On this basis, the incremental benefits of entry into long distance are very likely to be smaller than the corresponding benefits from entry into the local exchange. This is especially so given that local access serves as an input into the provision of long-distance service; the benefits from increased competition and possible technological innovations in local exchange services can be expected to flow through, in part, to long-distance markets.

Three considerations may limit any benefits to consumers in long-distance markets from BellSouth's entry into those markets. First, there is some danger that BellSouth will use its bottleneck local monopoly to reduce competition in long distance. Second, the benefits from adding another competitor to the long-distance market are muted in comparison with adding a competitor to the monopolized local market. Third, to the extent that BellSouth will be a reseller of long-distance services rather than a facilities-based competitor, its impact on long-distance markets is less pronounced.

I have reviewed the testimony put forward by Mr. Raimondi of WEFA regarding the predicted benefits to South Carolina consumers of granting BellSouth's application. As with any forecasting model, the results are no better than the assumptions going into the model. Mr. Raimondi simply *assumes* that long-distance service prices fall 25% below the baseline forecast by 2001 due to BellSouth's entry into long-distance markets, that BellSouth's entry will cause productivity gains and quality improvements of 2% per year, and that it would increase the labor force participation rate by 0.5% over the next ten years. Obviously, these types of changes would be beneficial to consumers and the State of South Carolina generally. The key question that the SCPSC, and the FCC, will have to address is whether *immediate* approval is better than waiting until BellSouth has done more to enable local exchange competition. Even assuming that the Commission concludes that BellSouth's entry into long distance markets will generate some benefits, those benefits must be balanced against the potential for harm from a reduction in competition in local exchange (and access) markets. Mr. Raimondi's analysis is at best incomplete in failing to address this key tradeoff.

In fact, I suspect that Mr. Raimondi's own model could easily be used to strengthen my conclusions: if BellSouth is not compelled to truly open its local exchange markets to competition, the South Carolina economy could suffer substantial harm, relative to forcing open those markets. Furthermore, mistaken approval of a Section 271 application by BellSouth could delay local competition for years to come, while denial of an otherwise proper application that lacks sufficient documentation to prove local exchange markets are open to competition will delay the benefits Mr. Raimondi anticipates by only a matter of months, until another application can be filed and approved. Mr.

Raimondi stated before the SCPSC that the WEFA study does not attempt to evaluate whether benefits to the long distance market will be foregone entirely or simply delayed if BellSouth does not enter the interLATA market immediately. However, he does acknowledge that, while there is a “time value of money”, if BellSouth enters three months later than the WEFA study assumes, “then the benefits will be put off for that three month period.” (Raimondi, App. C, Vol. 5, at p. 71)

C. Bundling Parity

There appears to be industry consensus that many consumers will value the ability to purchase a wide range of services - such as local, long distance, and wireless - from a single vendor.⁴ There seems little doubt that many industry participants are planning to market bundles of services. I anticipate that the marketing of bundles of telecommunications services to high-volume users will be especially intense.

As we look ahead to widespread competition and converging markets, firms that are unable to offer key pieces of attractive bundles will be at a competitive disadvantage. Therefore, parity in the ability to bundle services will be important to full competition in the future.

Other things being equal, the public interest militates against giving one firm or a group of firms a significant head start in offering bundled services, especially if those firms can rapidly gain market share by marketing the bundled services. The recent experiences of SNET and GTE demonstrate that entry into interLATA markets by ILECs can be achieved swiftly. In contrast, significant competition in local exchange markets remains

⁴ See BellSouth Brief at 80-82, and the Affidavit of Richard J. Gilbert.

unproven, in South Carolina and elsewhere. This view is supported in the testimony of Alfred Kahn and Timothy Tardiff, who state that "...whereas the rules for entry by competitors into the local exchange market are still in the process of being hammered out, the arrangements for fair access by the long distance carriers to the facilities of the BOCs have been in place *for upwards of a decade.*"⁵

My public interest analysis is consistent with the public interest objective of promoting bundling parity. If the Commission concludes that BellSouth can rapidly and reliably enter in-region long-distance markets once authorized to do so, and if the Commission concludes that there is far greater uncertainty about the ability of CLECs to effectively offer local service, at least until a myriad of details involving interconnection are resolved, the goal of a "level playing field" as markets converge mandates denying in-region authorization until local competition has truly been enabled, and then promptly granting such authorization (assuming the other conditions of the Act are also met by the application).

Full bundling parity will only be achieved once access charge reform is completed. So long as access charges remain above incremental costs, BellSouth will have an artificial cost advantage over other interexchange carriers in serving incremental interexchange business. In seeking business that adds to total long-distance calling, BellSouth will account for the true incremental cost of providing access for an additional minute of long-distance calling. In contrast, all other carriers seeking that same business must include in

⁵ Affidavit of Alfred E. Kahn and Timothy J. Tardiff, Application of SBC Communications Inc. for Provision of In-Region InterLATA Services in Oklahoma, Before the Federal Communications Commission, CC Docket No. 97-121, p. 27 (emphasis in original).

their costs the higher access charges they owe to BellSouth when they provide an additional long-distance minute. This logic is not altered by structural separation and imputation requirements.

D. Uncertainty Favors Delay

In balancing the three economic objectives I described earlier, it is important to remember that uncertainty favors deferring Section 271 authority until we can be confident that local competition has truly been enabled. Once approval has been granted, it will be nearly impossible to rescind as a practical matter. On the other hand, if approval is denied, the BOC can put in another application as soon as conditions have changed to warrant approval knowing it will receive a response within 90 days. The Commission should *not* regard its decision in response to Section 271 applications such as BellSouth's current application in South Carolina as a once-and-for-all choice of whether to authorize BellSouth to provide in-region long-distance services. Rather, the Commission should ask whether the public interest is better served by delaying approval until additional conditions are met.

III. Local Exchange Competition: General Principles

I turn now to apply the economic and public interest framework described above to BellSouth's South Carolina application, focusing largely on my first factor - the goal of opening local exchange markets to competition.

The key question in my analysis is this: Has BellSouth taken the necessary steps to enable genuine local exchange competition to flourish? If not, approval of BellSouth's

application will predictably and adversely affect progress towards true local exchange competition, both in South Carolina and elsewhere, contrary to the public interest.

In assessing current and prospective local exchange competition, two distinctions are crucial. First, one must distinguish *actual* competition from *potential* competition. Second, one must distinguish CLECs based on their entry strategies and based on their assets: facilities-based competition is qualitatively different from competition based on leased elements, which in turn differs from pure resale competition. Applying this tripartite division is complicated by the fact that given CLECs can and will adopt different approaches in providing services to local exchange customers, both across geographic regions and across time.

A. Actual vs. Potential Competition

By far the strongest proof of the feasibility of local exchange competition is the actual presence of significant facilities-based local competitors, *i.e.*, actual competition over independent facilities. The more widespread is local competition, the more it takes place over facilities outside the control of the ILEC, and the greater the number of actual CLECs, the more confident we can be that conditions are truly conducive to entry and expansion by CLECs.

Actual competition can in principle be measured through market shares, capacity levels, and the like. Having said this, I am keenly aware that the Act does not require any minimum market share for CLECs before in-region authorization can be granted. Indeed, to do so would mute the Bell Company's incentives to compete aggressively to retain market share in the face of new entry.

In the light of this fact, and given the severely limited state of actual local competition in South Carolina today, my analysis necessarily focuses on the prospects for genuine local competition in the near future. In significant part, this involves an assessment of the remaining entry barriers into local exchange markets in South Carolina, and the extent to which BellSouth can affect the height of the remaining barriers. In economic terms, I ask whether the barriers to entry into local markets in South Carolina, or at least those barriers associated with interconnection with BellSouth, have truly been substantially eliminated. Based on the available record, I cannot conclude that these barriers have indeed been eliminated.

B. The Importance of Facilities-Based Competition

Whether looking at actual or potential competition in local exchange markets, facilities-based competition is especially important. CLECs with their own facilities have made substantial sunk investments to serve the market, and are thus committed to an ongoing market presence. Facilities-based competition also is superior to resale competition because it represents far greater competitor independence of the ILEC. Ultimately, for regulation to wither away and give way to competition will require the presence of strong, facilities-based competitors to BellSouth. Investments in alternative local loop facilities would be especially significant, as these facilities represent a lasting commitment to the local market. Congress expected these investments would be made, and repeatedly gave the example of cable facilities.

Facilities-based competitors also represent alternative sources of access services. Resellers do not serve this function. Widespread competition in the provision of access will help ensure that interexchange markets remain competitive after BOC entry.

Competition based on the leasing of network elements is not nearly as significant as true facilities-based competition. A CLEC who is leasing elements from the incumbent local exchange carrier clearly remains heavily reliant on the incumbent carrier.

Additionally, the necessary sunk investments, and thus the CLEC's commitment to the market associated with leasing network elements, are far lower than those required of a CLEC building its own loop plant.

Nevertheless, leased elements are preferable to resale in terms of offering competition to the ILEC. First, CLECs who are leasing network elements can offer competition along a number of dimensions that resellers cannot. Second, resale rates are not based on the underlying costs of the facilities, so resale competition does relatively little to drive retail rates down towards cost.

I would hope that all parties can agree that resale, while offering valuable competition over some aspects of service (such as marketing, billing, or customer service), is inherently limited and less meaningful than the provision of service through the leasing of unbundled network elements. Professors Harris and Teece, in their affidavit on behalf of Ameritech Michigan, appear to agree with this, stating that "for purposes of competitive assessment, self-supplied facilities and leased unbundled network elements...are clearly distinct from resale of services over the incumbent's facilities."⁶ Nonetheless, competition through the use of unbundled network elements is not a substitute for facilities-based competition.

⁶ Joint Affidavit of Robert G. Harris and David J. Teece On Behalf of Ameritech Michigan, in the matter
Carl Shapiro
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